



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/075,035      | 02/12/2002  | Z. Gerald Liu        | 4695-00009          | 7509             |

26753 7590 03/17/2006

ANDRUS, SCEALES, STARKE & SAWALL, LLP  
100 EAST WISCONSIN AVENUE, SUITE 1100  
MILWAUKEE, WI 53202

EXAMINER

TRAN, HIEN THI

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1764

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/075,035

**Applicant(s)**

LIU ET AL.

**Examiner**

Hien Tran

**Art Unit**

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-17, 91-94 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-17, 91-94 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 91-94 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 91, it is unclear as to how the flow channels are related to the flow channels, the flow-through channel and the wall-flow channel set forth in claim 9; in line 2 it is unclear as to where it is shown in the drawings; in line 7 it is unclear as to how the third sheet is related to the second sheet. See claim 93 likewise.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 9-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagai et al (5,863,311).

With respect to claims 9, 12, 15, Nagai et al discloses an exhaust aftertreatment combined filter and catalytic converter comprising:

Art Unit: 1764

a plurality of channels, each having both: a) a flow-through channel catalytically reacting with an exhaust; and b) a wall-flow channel trapping particulate (Figs. 3A, B, 14A, B).

the exhaust aftertreatment combined filter and catalytic converter comprises a plurality of sheets, at least one of which comprises filter media sheet defining said channels (col. 7, lines 35-45; col. 10, lines 53-65, Figs. 3A, B, 14A, B).

Nagai et al discloses the overlapped channel sections in the flow channels in Figs. 3A, B, 14A, B in Nagai et al.

With respect to claims 9, 16, Figs. 14A-14B in Nagai et al show that the exhaust gas flow axially through the combined filter and catalyst converter from an upstream end to a downstream end, said filter sheet having a first face facing upstream end and a second face facing downstream end, the flow-through channel having a portion extending downstream from the second face of the media sheet; the combined filter and catalytic converter having first, second and third sequential surfaces in the flow channel, wherein exhaust gas flows firstly along and through said first sequential surface, then secondly along and through said second sequential surface, then thirdly along said third sequential surface wherein said first face of said filter media sheet 9 is said first sequential surface, said second face of the filter media sheet 9 is said second sequential surface and said overlapped section of the flow-through channel is said third sequential surface.

With respect to claims 10-11, 13-15, Nagai et al further discloses that the channels have plurality of catalytically treated surfaces and that the surfaces of the channels are treated with different catalysts (see, for example, col. 13, lines 23-31 and col. 14, lines 20-23; col. 4, lines 25-32, Fig. 11).

Art Unit: 1764

With respect to claims 12, 17, Figs. 14A-14B in Nagai et al show that the exhaust gas flow axially through the combined filter and catalyst converter from an upstream end to a downstream end, said filter sheet having a first face facing upstream end and a second face facing downstream end, the flow-through channel having a portion extending upstream from the second face of the media sheet; the combined filter and catalytic converter having first, second and third sequential surfaces in the flow channel, wherein exhaust gas flows firstly along and through said first sequential surface, then secondly along and through said second sequential surface, then thirdly along said third sequential surface wherein said portion of flow-through channel is said first sequential surface; said first face of said filter media sheet 9 is said second sequential surface, said second face of the filter media sheet 9 is said third sequential surface.

Instant claims 9-17 structurally read on the apparatus of Nagai et al.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 9-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,669,913.

Art Unit: 1764

Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to the same conceptual invention.

***Response to Arguments***

7. Applicant's arguments filed 1/9/06 have been fully considered but they are not persuasive.

Since applicants are requesting to withdraw the terminal disclaimer filed 8/18/05 as set forth in the communication filed 1/9/06, the double patenting rejection, therefore, is again applicable.

Applicants argue that Nagai et al does not teach any subject matter recited in instant claims. Such contention is not persuasive as Nagai et al does teach all of the structural limitation set forth in instant claims as set forth above.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1764

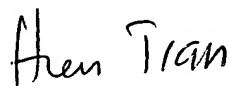
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454.

The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1454. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT



**Hien Tran**  
**Primary Examiner**  
**Art Unit 1764**